

# RADIATION REPORT



Vol. 25, No. 2

BUREAU OF RADIATION CONTROL

WINTER 2002-2003

## TEXAS RADIATION ADVISORY BOARD RESOLUTION: USE OF KI IN NUCLEAR POWER PLANT EMERGENCIES

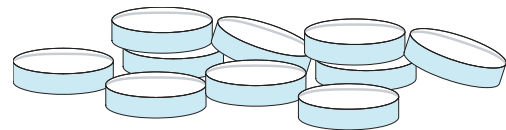
*By Margaret Henderson*

This resolution of the Texas Radiation Advisory Board (TRAB) agrees with the state's policy that Potassium Iodide (KI) should not be stockpiled for distribution to the general public within the ten-mile emergency planning zones surrounding Comanche Peak Steam Electric Station and South Texas Project Nuclear Electric Generating Station.

### WHEREAS:

The citizens of the State of Texas are entitled to the best available protection in the event of an emergency at one of the nuclear power plants in Texas. TRAB realizes that several states in the United States have implemented plans requiring nuclear power plants to stockpile KI. However, for several reasons, the TRAB does not recommend that Texas stockpile and distribute KI:

- \* Many complexities surround the issue of providing KI to the general public. These include timing and logistics of stockpiling and distribution, as well as medical concerns for possible allergic reactions or adverse drug interactions.
- \* KI protects only against radioiodine. KI will provide no protection against exposure to all other radioactive materials that may be involved in an emergency at a nuclear power plant.
- \* The distribution and use of KI by the public in the event of a radiological emergency would provide partial protection at best and may provide no protection at all while conversely providing the public the impression of complete protection from radiation exposures. No known prophylaxis exists that will provide complete protection against radiation exposure.



In Texas, emergency response plans recommend evacuating the public from the affected areas. Prompt evacuation would provide sure and effective protection to the general public against all radioactivity and negate any need for KI. In special instances, when individuals cannot be evacuated (such as persons in hospitals, nursing homes, or prisons), KI would be provided.

TRAB shares the concern of the Texas Department of Health, Bureau of Radiation Control that stockpiling KI could create the false impression that evacuation is unnecessary. This could result in failure of the public to evacuate when recommended.

### THEREFORE, BE IT RESOLVED:

- \* Texans should expect the highest level of protection in a radiological emergency.
- \* The decision by the Texas Department of Health, Bureau of Radiation Control regarding the distribution and use of KI should be based on the technical merits of the issue.
- \* The partial protection that may be afforded by KI is no substitute for the comprehensive protection afforded by timely evacuation.
- \* The Texas Radiation Advisory Board agrees with the current Bureau of Radiation Control position that KI should not be stockpiled for distribution to the general public. For more information regarding potassium iodine (KI), contact the Bureau of Radiation Control at (512) 834-6688.



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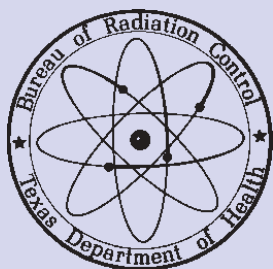
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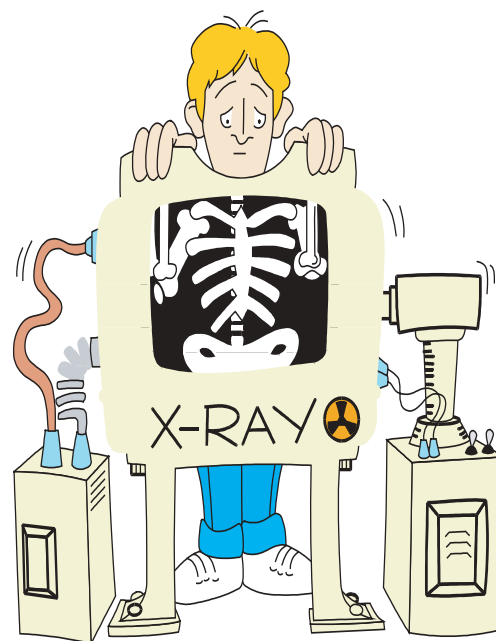
# BRC Provides Equipment Installation Clarification for Newly Installed X-Ray Units

By Debbie Borden

The Bureau of Radiation Control inspectors are finding numerous violations regarding installations of unregistered x-ray units. When a new unit is installed in a facility, it is the facility's responsibility to report the installation to the Bureau of Radiation Control.

The report must include the manufacturer, model and serial numbers and the type of unit, such as a radiographic or a CT unit. The 25 Texas Administrative Code (TAC) §289.226 (p) (1) (A) requires notification within 30 days. You may submit a copy of the installation report instead of a letter. If the new unit replaces an existing unit, you should report the change in order to have the old unit deleted. You must provide information regarding the disposition of the unit including the model and serial numbers. Make sure that the model and serial numbers are correct. If the numbers do not match what is currently on file, the unit will not be deleted.

If you are an installer of x-ray equipment, you are required by 25 TAC §289.226 (q) to



report the installation to the Bureau of Radiation Control within 30 days. A copy of the report of assembly is acceptable. If the installation is for a new facility, the facility must register with the Bureau of Radiation Control. Please direct them to contact the Bureau of Radiation Control for the appropriate application forms. There have been some instances in which new facilities assumed they were registered based on the installation report given to them by the installer.

If you have any questions regarding the requirements for installation of x-ray equipment, please contact the Registration Section of BRC at (512) 834-6688.



# ***TRAB Resolution:***

## **Texas Radiation Advisory Board Urges Legislation to Create a Low-Level Waste Disposal Facility**

Whereas, the use of radioactive isotopes in energy production, biomedical research and medical procedures such as cancer diagnosis and treatment benefit all Texans; and

Whereas, these beneficial medical applications produce low-level radioactive waste that must be disposed of safely; and,

Whereas, the low-level radioactive waste disposal facility in Barnwell, South Carolina is scheduled to permanently restrict out of state compact waste on or before the year 2008, impacting Texas waste generators that use the site;

Whereas, on-site storage of radioactive waste simply defers the problem, creates multiple storage sites, and keeps by-product material scattered throughout the state, thereby making the citizens more vulnerable to terrorists' threats and natural disasters;

Whereas, the State of Texas is legally bound to fulfill its contractual obligations to the other members of the Texas/Maine/Vermont compact and provide a disposal facility for low-level radioactive waste generated in those states;

Whereas, a Texas facility is still needed in order to comply with federal law;

Now therefore, be it resolved that:

The Texas Radiation Advisory Board strongly supports the need for a safe disposal facility for low-level radioactive waste and urges, upon careful review, that the Texas legislature pass legislation that will allow for the creation of a facility that will lead to the isolation and disposal of low-level radioactive waste.

Passed and Adopted on this 20<sup>th</sup> day of July, 2002 by the Texas Radiation Advisory Board, 1100 W. 49<sup>th</sup> Street, Austin, Texas 78756.

For more information regarding TRAB's recommendations on low-level waste disposal contact the Bureau of Radiation Control at (512)834-6688.

# **AMMOGRAPHY CORNER**

## **Crossover, Crossover and More Crossovers!**

*By Jerry Cogburn*

Just when you think this procedure is perfectly understood somebody comes up with another angle. What is crossover? In film manufacturing it is almost impossible to make x-ray film emulsion that maintains the same characteristics from one batch or lot to the other. Crossover is the name given to a process intended to eliminate the effect of film emulsion differences on the daily processor performance evaluations. Although, the crossover process is not required by rule, it is the only practical, and acceptable means, to compensate for differences in control emulsion.

On a recent inspection, it was noted that each crossover was being done over a ten-day period, using only the results of daily QC films. The QC Technologist, who was diligent and responsible, was using the average of the sensitometric measurements from the daily processor per-

formance evaluations, conducted with the last five sheets of old QC film and the first five days with the new QC film. Film processors operate a little differently every day, for a variety of reasons, as indicated by most QC records. Changes in processor operation can even be tracked throughout the workday. In a crossover, we try to eliminate these changes and their effect.

The main objective of the crossover process is to change the aim points in compensation for the differences in film emulsion, and film emulsion only. At this facility, the objective was defeated by spreading the process over a ten-day period, which included all the daily processor variations. All ten crossover films must be processed, over the shortest possible time period, if the effects of processor variations are to be reduced to a negligible level. In effect, this facility was re-establishing proces-

sor operating parameters at every control film emulsion change, and this is not on the list of acceptable reasons for re-establishing operating parameters.

For a comprehensive explanation of the crossover process, please consult the 1999 American College of Radiology Mammography Quality Control Manual. For additional information regarding this, or any other mammography compliance issues contact Jerry Cogburn at (512) 834-6688, extension 2037.

*The version of the article titled "Crossover, Crossover and More Crossovers" featured in the Mammography Corner on pages 4-5 of the Radiation Report/Summer 2002 issue was published incorrectly, and a printed copy was distributed to our Licensees, Registrants and interested persons in July 2002. Please accept our apologies and enjoy this revised copy.*

**2003**

### **INDUSTRIAL RADIOGRAPHY EXAMINATION SCHEDULE**

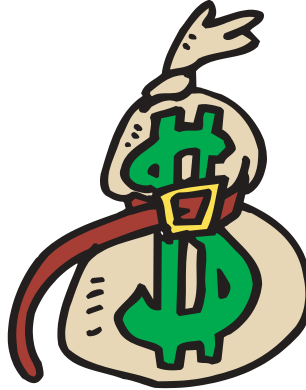
*All Exams Begin After Registration Is Completed*

**2003**

Location	Examination Date	Registration Time	Deadline for Submitting Application
AUSTIN	April 2, 2003	12:30 p.m.	March 21, 2003
	May 7, 2003	12:30 p.m.	April 25, 2003
	July 9, 2003	12:30 p.m.	June 27, 2003
	August 6, 2003	12:30 p.m.	July 25, 2003
	October 1, 2003	12:30 p.m.	September 19, 2003
	December 3, 2003	12:30 p.m.	November 21, 2003
DALLAS	March 5, 2003	10:30 a.m.	February 21, 2003
	September 3, 2003	10:30 a.m.	August 22, 2003
HOUSTON	June 3, 2003	1:00 p.m.	May 23, 2003
	June 4, 2003	9:00 a.m.	May 23, 2003
	November 4, 2003	1:00 p.m.	October 24, 2003
	November 5, 2003	9:00 a.m.	October 24, 2003
ODESSA	March 12, 2003	10:00 a.m.	February 28, 2003

# ***PRINTING OF RADIATION REPORT CEASED UNTIL FURTHER NOTICE!***

***State Legislators  
Urging Budget Cuts!***



***All State Agencies  
Urged to Save Money!***

## **BUDGET CRUNCH AFFECTS RADIATION REPORT PRINTING!**

This issue and possible future issues of the **Radiation Report** will not be printed. Due to the State of Texas' current budget cutbacks, the **Radiation Report's** printing has been affected.

Electronic mail or the internet is the only way of receiving the **Radiation Report** until further notice.

The BRC encourages you to join the list of electronic subscribers, so you won't miss out on the important information the **Radiation Report** provides. You will be able to view the **Radiation Report** on your computer screen or print it out and read it. Also, you can pass it along via email to others who are interested in reading the newsletter.

**BRC will NOT give out your email address to outside entities.**

In the Summer 2002 edition of the **Radiation Report**, the BRC began to collect email addresses in an effort to defeat the high cost of printing and mailing over 17,000 copies to our Licensees, Registrants and interested persons statewide. We are in the process of compiling a list and would like to hear from you.

If you want us to email future copies of the **Radiation Report**, simply fill out the form on Page 6. For your convenience, there are several ways for you send it back to us.  
(See Page 6 for details)



# ***RADIATION REPORT***

## **VIA ELECTRONIC MAIL**

To receive future email copies of the **Radiation Report**, simply fill out the form below, and either fax it to us at (512) 834-6716 or mail it back to us at:

Bureau of Radiation Control  
Texas Department of Health  
Attention: Public Information and Training  
1100 West 49th Street  
Austin, Texas 78756-3189

**OH YEAH, YOU CAN EMAIL US WITH THIS INFORMATION TOO!**

Email: [julie.davis@tdh.state.tx.us](mailto:julie.davis@tdh.state.tx.us).

*Please fill-out **Required (\*) Fields** completely. This information will help us to better process and serve your requests. Don't Forget to include your **\*Phone Number** and **\*Email Address**. Thank You!!*

\* Name: \_\_\_\_\_

\* Company: \_\_\_\_\_

\* Mailing Address: \_\_\_\_\_  
\_\_\_\_\_

\* City, State & Zip: \_\_\_\_\_

\* Phone number: \_\_\_\_\_

\* Licensee number: \_\_\_\_\_  
(If you have it handy!)

\* E-Mail address: \_\_\_\_\_





# Thefts of Nuclear Gauges on the Rise in Texas

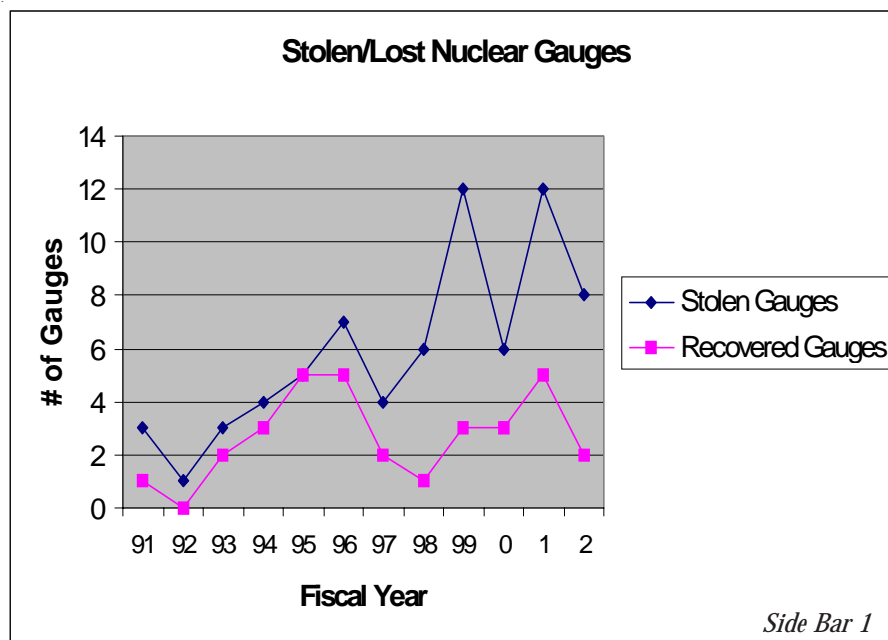
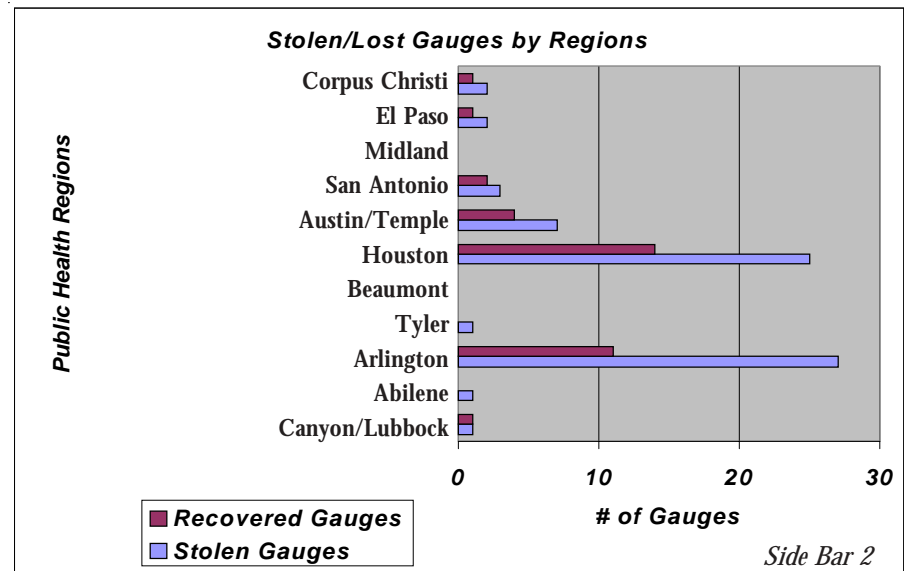
By Julie Davis

Thefts of portable gauges are on the rise in the State of Texas. The Bureau of Radiation Control (BRC) has compiled information over the past eleven years to evaluate information on stolen gauges in Texas.

The Texas Unrecovered Nuclear Gauges database is just one of the many tools that the BRC is using to record and store information about the types of gauges, companies from where the thefts took place, the manufacturer of the gauges, and the areas or regions in Texas where they were taken.

These statistics are now being used to evaluate trends in the gauge theft industry. Information compiled from this database shows that there has been a steady increase in the number of stolen nuclear gauges, versus those that have never been recovered.

Although, Texas hopes to locate and prosecute all individuals responsible for thefts of the gauges, many may never be recovered. (See Sidebar 1)



Public Health Region 3 (PHR 3 - the Dallas/Fort Worth Metroplex) leads Public Health Region 6 (PHR 6 - the Houston Metroplex) in the number of stolen and recovered gauges.

As you can see in Sidebar 2 from 1991 to 2002 the Dallas Metroplex had a total of 27 gauges stolen, while only eleven out of the 27 stolen gauges were recovered. Likewise, the Houston Metroplex ranked second with 25 gauges stolen and 14 gauges recovered over the same period of time.

Further analysis of the gauges stolen and/or missing indicate that 74 percent of the stolen gauges were manufactured by Troxler; sixteen percent by Humbolt, and ten percent by Campbell Pacific Nuclear (CPN). A total of 38 gauges remain missing, all but one of them stolen in Texas.

# BRC Employee Receives Honors from CRCPD

By Julie Davis

Jan Endahl, manager of the Bureau of Radiation Control's Industrial Certification Program, was the recipient of the 2002 James W. Miller Award presented by the Conference of Radiation Control Program Directors (CRCPD). The James W. Miller Awarded is presented to those individuals who, through the day-to-day tasks associated with supporting a radiation control program, have made a significant contribution in a specific area of radiological health.

Ms. Endahl has been instrumental in the development and implementation of a national program to assist states in testing Industrial Radiographers, which has made a significant

contribution to the protection of the public from radiation sources used in Industrial Radiography.

She has also served as CRCPD Chairperson of

the Committee on Industrial Radiography since January 1995. Ms. Endahl's professionalism and expertise has provided leadership for the State of Texas and the nation.



Photograph by Julie Davis

Jan Endahl, 2002 recipient of the James W. Miller Award.

## STATE HOLIDAYS

The BRC will be closed in observance of the following holidays:

*Memorial Day* - May 26, 2003

*Independence Day* - July 4, 2003

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